

Significant Changes in Seattle Codes

Seattle is proposing to adopt a suite of construction codes that include National, State, and Seattle amendments. The following summary outlines the significant changes that will be included in the Seattle Codes adopted this year. A [W] indicates the change is a significant Washington State code change. A [S] indicates a significant Seattle amendment:

2021 Seattle Building Code

Mass Timber [W]

Permits the wood of mass timber ceilings in a Type IV-B structures to be 100% exposed.

ICC A117.1-2017 Accessible and Usable Buildings and Facilities [W]

This code adopts the newest version of the accessibility standard – ICC A117.1. This standard has larger clearances for new construction primarily to accommodate dimensional requirements of powered wheelchairs and similar devices. Alterations in existing buildings are permitted to be designed to the prior standard, ICC A117.1-2009.

Tsunami Loads [W]

Structural design for tsunami loads was added in the 2018 Code for Risk Category III and IV buildings (hospitals, public safety buildings, and similar structures) located in the Tsunami Design Zones. The 2021 code adopts the latest Washington Tsunami Design Zone (WA-TDZ) maps. In addition, the state pre-adopted the latest tsunami design zone requirements from ASCE7-22.

Elevator Code (Seattle Building Code Ch.30) [S]

Seattle is adding specific elevator out of service and decommissioning requirements. Additional reporting requirements on elevator operation incidents and failures.

Loft [W]

Though previously allowed in Seattle by policy, the State has added provisions for lofts in residential occupancies. The idea is that this isn't considered habitable space and doesn't require compliance with the livability provisions, while providing area limitations, allows ceiling heights less than 80 inches, and reduces access and egress requirements to the loft to provide flexibility while maintaining a safe environment.

Energy Storage Systems (ESS) [W]

The 2021 state fire code has adopted updated requirements for ESS that include operational permit, system monitoring, area separation, and adds ongoing inspection and testing.

2021 Seattle Residential Code

Loft [W]

The State has modified existing requirements of sleeping lofts to provide flexibility while maintaining a safe environment.

Electric Vehicle Charging Infrastructure [W]

The State has approved EV infrastructure requirements for one and two-family dwellings.

2021 Seattle Existing Building Code

Unreinforced Masonry (URM) buildings [S]

URM buildings pose a significant collapse hazard in an earthquake. Seattle is providing several amendments to incentivize voluntary public safety improvements to unreinforced masonry (URM) buildings.

- Chapter 2 Section 202 defines URM, URM building, and Retrofitted URM building.
- Chapter 3 Section 304.5 establishes seismic regulations for URM buildings.
- New Appendix A6 codifies the URM Retrofit Technical Standard, a new minimum standard designed to reduce costs and address priority structural deficiencies.

Seismic Design Forces [S]

Removed existing Seattle amendment for structural design of existing buildings to align with national code ASCE 41-23.

2021 Seattle Mechanical Code

Smoke filtration

Ducted air handlers and ventilation systems for specific occupancies shall provide a MERV 13 filter or a MERV 4 filter for un-ducted air handlers. This will assist with maintaining the air quality in a building during a forest fire or other adverse event.

Minimum kitchen exhaust system

Intermittent kitchen exhaust system requirements set a minimum airflow rate or capture efficiencies for kitchen range hoods based on the type of kitchen appliance. The intent is to reduce the exposure to detrimental health impacts from the pollutants produced by cooking.

2021 Seattle Plumbing Code

Definitions

Modification of some definitions to provide clarity or align with adopted reference standards.

Dead Leg

Addresses dead ends in a water supply system with no circulation, also called plumbing dead legs, to assist with preventing growth of bacteria in the water supply systems.

2024 Seattle Boiler Code

Minor modifications to address errors and omissions.

2023 Seattle Electrical Code

ESS (Energy Storage Systems)

New installations of Energy Storage Systems will require a plan review.

Photovoltaic installations (PV)

Installations of PV equipment will be required to pass an on-site cover inspection before the installation can be completed.

Smoke Control Fans

Smoke control fans will need to be identified on the one-line drawings submitted as part of construction documents.

Calculated Electric Load

Modify Article 220.84 to prevent calculated excess service capacity when using advanced heat pump systems.

Electric Vehicle Charging Infrastructure

Modifies Article 220.57 and 625.27 to align EV charging infrastructure requirements with the Washington State Code.

2021 Seattle Energy Code

Lighting

Interior lighting power reduced by approximately 5% below current code.

Electrification

Commercial kitchens in new buildings must have capacity for future electrification.

Existing Buildings

Softening rules for replacement of central HVAC gas and electric resistance heating equipment with heat pumps:

- Exempt affordable housing, hospitals, nonprofits, and buildings that would require major utility service upgrades.
- Allow buildings to retain (for now) 50% of their gas heating capacity.
- Allow emergency replacements of gas equipment, using either a TCO (temporary certificate of occupancy) or a performance bond that requires the heat pump installation within 4 years.

However, all of the above must complete a “future decarbonization plan” that includes an engineered schematic design and cost estimate for future conversion to heat pumps. Similar rules for replacement of central service water heating systems. Similar rules requiring upgrade of central HVAC heating systems to heat pump at time of chiller replacement.